



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/902,727 | 07/12/2001 | Arpan P. Mahorowala | YOR92000064US1 | 9512 |
| 7590 | 06/25/2004 | | EXAMINER | |
| Burton A. Amernick Connolly Bove Lodge & Hutz P.O. Box 19088 Washington, DC 20036-3425 | | | NOVACEK, CHRISTY L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2822 | |

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------|------------------------|---------------------|
| Advisory Action | Application No. | Applicant(s) |
| | 09/902,727 | MAHOROWALA ET AL. |
| | Examiner | Art Unit |
| | Christy L. Novacek | 2822 |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 June 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) The period for reply expires 3 months from the mailing date of the final rejection.
- b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. The proposed amendment(s) will not be entered because:
 - (a) they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) they raise the issue of new matter (see Note below);
 - (c) they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. Applicant's reply has overcome the following rejection(s): none.
4. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
6. The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

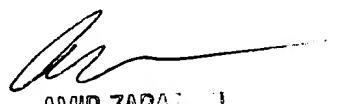
Claim(s) rejected: _____.

Claim(s) withdrawn from consideration: _____.

8. The drawing correction filed on _____ is a) approved or b) disapproved by the Examiner.

9. Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. Other: _____.



AMIR ZARA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Advisory Action

This office action is in response to the after-final response filed June 8, 2004.

Response to Arguments

In the final rejection mailed March 8, 2004, Examiner notified Applicant that the 37 C.F.R. 1.131 Declaration filed November 24, 2003 was insufficient to antedate the Pike reference. Applicant argues in the remarks filed June 8, 2004 that the evidence (Figure 4) submitted in the declaration “shows reduction to practice of the entire invention”. However, in the affidavit in question, the co-inventor swears only “the present invention was conceived prior to the filing date of the Pike reference and was pursued with diligence from the time of conception until the filing date of the application”. The declaration does *not* state that the invention was “reduced to practice” before the filing date of Pike. Thus, Applicant’s argument that Figure 4 shows reduction to practice is moot in view of what is sworn to in the declaration.

Regarding the rejection of claims 1-26 and 31 under 35 USC 112, second paragraph, applicant argues that the rejection is improper because allegedly, a “person of ordinary skill in the art would understand ‘tuned polymer’ from the context of the disclosure” (pg. 8 of applicant’s response). To support his assertion, applicant states, “Given the disclosure of suitable type of polymer and suitable properties, a skilled artisan would readily be able to select an appropriate polymer for the resist.” However, whether or not someone would be able to select an appropriate polymer for the resist based on applicant’s disclosure is not the issue which warrants the 112, second paragraph rejection. The term “tuned polymer”, because the definition thereof, has not been disclosed in applicant’s specification, is deemed so ambiguous that one of ordinary skill in the art would not know if they were infringing upon applicant’s claim or not.

As is stated in the MPEP, “If the language of the claim is such that a person of ordinary skill in the art could not interpret the metes and bounds of the claim so as to understand how to avoid infringement, a rejection of the claim under 35 U.S.C. 112, second paragraph would be appropriate.”

Regarding the rejection of claims 1-8, 12, 13, 17, 18, 20 and 22-30 under 35 U.S.C. 103(a) as being unpatentable over Pike et al. (US 6,420,097) in view of the admitted prior art, Applicant argues, “Examiner construes the claims to equate the underlayer of the present invention with the hardmask of Pike”. This argument about what is or is not a “hardmask” is moot because nowhere in Applicant’s claims 1-8, 12, 13, 17, 18, 20 and 22-30 is the word “hardmask” recited as a limitation.

Further regarding the rejection of claims 108, 12, 13, 17, 18, 20 and 22-30 under U.S.C. 103(a) as being unpatentable over Pike et al. in view of the admitted prior art, Applicant argues, “The UTR [120] of Pike is not properly equivalent to the underlayer of the present invention”. However, nowhere in the previous office actions has the Examiner made the assertion that the UTR layer 120 is equivalent to the underlayer. Instead, the “underlayer” as recited in Applicant’s claim 1, has been equated to layer 126 of Pike, as was stated in the previous office action. Thus, this argument is moot.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christy L. Novacek whose telephone number is (571) 272-1839. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30 - 5:00.

Art Unit: 2822

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLN
June 24, 2004



AMIR ZARABIAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800